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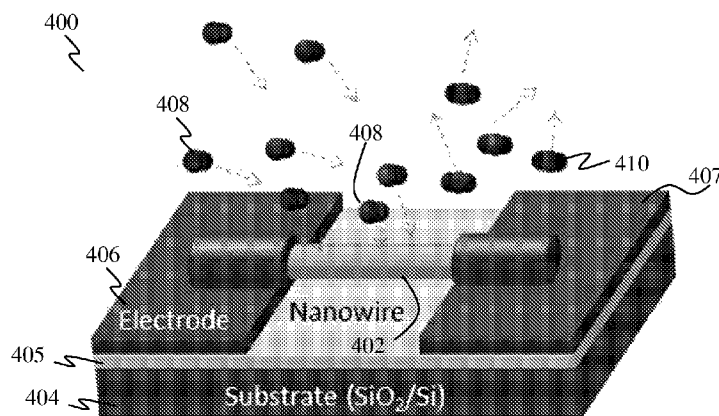


FIG. 4A

(57) Abstract: According to embodiments of the present invention, a method of forming an indium oxide nanowire including copper-based dopants is provided. The method includes providing an indium-based precursor material and a copper-based dopant precursor material, and performing a thermal evaporation process to vapourise the indium-based precursor material and the copper-based dopant precursor material to form an indium oxide nanowire comprising copper-based dopants on a substrate. According to further embodiments of the present invention, an indium oxide nanowire including copper-based dopants and a gas sensor are also provided. According to further embodiments of the present invention, a method of forming a plurality of nanowires including metal phthalocyanine, a nanowire arrangement and a gas sensor are also provided.